



Palmer Amaranth



Mature Palmer amaranth plant with long seed heads.



Key Identifying Characteristic:

Female Palmer amaranth plants can have a prickly feel due to stiff bracts at the leaf axil.



Key Identifying Characteristic:

When viewed from above, Palmer has a rosette like appearance where the leaves circle around the stem resembling a poinsettia.



Some Palmer plants have a white or purple watermark, occasionally u-shaped. However, other pigweed species may have a watermark as well.



Palmer leaf shape is wide and ovate or diamond shaped.

Key Identifying Characteristic:

Palmer amaranth stem and leaves are smooth (hairless).



Stems can be green, green with red stripes or red in color.



Key Identifying Characteristic:


Palmer amaranth will have petioles as long as or longer than the leaf blade.



A single hair is often found in the leaf tip notch.



Palmer amaranth just starting to form flower buds.

A tall, slender Palmer amaranth plant stands prominently in a cornfield. Its long, green terminal inflorescence reaches high into the sky, towering above the surrounding corn plants. The plant's leaves are green and serrated, and its stem is a reddish-brown color. A yellow arrow points to the top of the inflorescence.

Palmer can grow 3 - 8 feet tall. It will typically grow above a crop canopy before flowering.

Long terminal inflorescence

Palmer produces the longest terminal flower spikes (2 to 3 ft or more) among all 5 pigweed species of MD.





Palmer has a well-developed taproot system that may be reddish in color. Lateral root branches arise from the main taproot system.







At the end of the summer, Palmer amaranth changes color to a lighter green. In the fall, its color changes to yellow, orange, and ultimately light to dark brown.



Palmer amaranth is a prolific seed producer, producing 100,000 – 500,000 seeds per plant. The seeds are dark reddish-brown to black in color and 1 to 1.3 mm long.



Palmer amaranth growing in a soybean field.

Palmer amaranth growing in a corn field.

